

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-105. (Cancelled)

106. (New) A dispensing assembly to be coupled to a resilient-walled vessel containing a liquid, comprising:

    a neck portion including a sidewall structured to engage the interior of a neck of a resilient walled-vessel;

    a tip distally extending from the neck portion and defining a bore positioned to be in direct communication with the vessel when coupled to the vessel to provide a substantially linear fluid flow path from the vessel to the tip, the tip including a distal end; and

    a valve provided at the distal end of the tip, the valve extending substantially coaxially with the bore;

    wherein the valve is structured to allow drop-wise liquid dispensing from the vessel when the assembly is coupled to the vessel and sufficient manual pressure is applied to the resilient wall of the vessel, and to prevent liquid back flow at zero as well as near zero pressure differentials across the valve.

107. (New) The dispensing assembly of claim 106, further comprising:

at least one vent opening structured to allow air into and out of the vessel when the dispensing assembly is coupled to the vessel; and

at least one filtration element extending across the at least one vent opening and structured to allow gaseous fluids to pass through the vent opening while blocking liquid fluids and contaminants.

108. (New) The dispensing assembly of claim 107, wherein the at least one vent opening is oriented at a substantially perpendicular angle to the bore of the tip.

109. (New) The dispensing assembly of claim 107, wherein the at least one vent opening is oriented coaxially with the bore of the tip.

110. (New) The dispensing assembly of claim 107, further comprising a retaining member structured and positioned to maintain the at least one filtration element in a fixed position.

111. (New) The dispensing assembly of claim 106, wherein the valve comprises a distal surface, at least one slit extending through the distal surface and a plurality of mutually facing surfaces extending along opposing sides of the at least one slit, the plurality of mutually facing surfaces being structured to exert sufficient force on one another when the valve is closed to prevent microbe-sized particles from passing through the at least one slit when the valve is closed.

112. (New) The dispensing assembly of claim 111, wherein the plurality of mutually facing surfaces are structured to exert sufficient force on one another to prevent particles larger than 0.22 microns in diameter from passing through the at least one slit when the valve is closed.

113. (New) The dispensing assembly of claim 106, further comprising a cap structured to cover the tip when the assembly is not in dispensing use.

114. (New) The dispensing assembly of claim 113, further comprising an anti-microbial liner in the cap.

115. (New) The dispensing assembly of claim 106, wherein the tip is an over-molded elastomeric nozzle coupled to the neck portion, and the assembly further comprises at least one vent opening located in the neck portion structured to allow air into and out of the vessel when the dispensing tip is coupled to the vessel, and at least one co-molded filtration member extending across the at least one vent opening and structured to allow gaseous fluids to pass through the vent opening while blocking liquid fluid and contaminants.

116. (New) The dispensing assembly of claim 106, wherein the neck portion is formed of a first material, and the tip is formed of a second material more flexible than the first material.

117. (New) The dispensing assembly of claim 114, wherein the first material is selected from the group consisting of polyethylene, polypropylene, polystyrene, polycarbonate, and acrylonitrile- butadiene-styrene polymers, and mixtures thereof, and the second material is selected from the group consisting of silicone, polyisoprene, plasticized polyvinyl chloride, polyurethane, ethylene-butylene copolymers, and mixtures thereof.

118. (New) The dispensing assembly of claim 106, further comprising a filtration member, wherein the neck portion, the tip, and the filtration member are coupled together as a unitary structure to be coupled to resilient walled vessel.

119. (New) The dispensing assembly of claim 106, wherein the bore of the tip provides an unobstructed fluid flow path from the vessel to the tip.

120. (New) The dispensing assembly of claim 106, wherein the valve is a check valve having a cracking pressure greater than 0.1 psi.

121. (New) The dispensing assembly of claim 106, wherein the distal end of the tip has a diameter, and the valve comprises a slit formed in the distal end, the slit having a length less than the diameter of the distal end of the tip.

122. (New) The dispensing assembly of claim 106, further comprising at least one deflector element structured to deflect liquid away from the at least one vent opening.

123. (New) The dispensing assembly of claim 106 coupled to a resilient-walled vessel containing a liquid.

124. (New) A method of dispensing a preservative-free solution, comprising:

providing a preservative-free solution in a resilient-walled vessel comprising the dispensing assembly of claim 106;

applying sufficient manual pressure to the resilient wall of the vessel to dispense a single drop of the solution; and

immediately thereafter removing the manual pressure to close the valve.